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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO.       |
|---|-------------|----------------------|-------------------------------|------------------------|
| 10/696,739  | 10/28/2003  | Rex Miller           | 0275M-000650                  | 6312                   |
| 27572 7590 09/10/2007<br>HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O. BOX 828<br>BLOOMFIELD HILLS, MI 48303 |             |                      | EXAMINER<br>SAETHER, FLEMMING |                        |
|   |             |                      | ART UNIT<br>3677              | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>09/10/2007       | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/696,739

Applicant(s)

MILLER ET AL.

Examiner

Flemming Saether

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-10, 13, 15-17, 19, 20, 22-24, 27-30, 32-34, 38-42, 44-46 and 48-54 is/are pending in the application.
- 4a) Of the above claim(s) 8, 9, 13, 20, 23, 42 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 10, 12, 15-17, 19, 22, 24, 27-30, 32-34, 38-41, 44-46, 49-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Election/Restriction***

Claims 8, 9, 13, 20, 23, 42, and 48 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) is view of election in the paper filed 2-24-2005.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 6, 7, 10, 12, 15-17, 19, 22, 24, 27-30, 32-34, 38-41, 44-46 and 49-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of the independent claims, it is unclear what is intended by the countersink having a cross-section that defines a flat surface since the countersink is in fact conical. Indeed, by definition, a conical surfaces is curved thus cannot also be flat even in cross-section.

As regards claim 24, 49 and 54, it is unclear what is intended by the conical diameter because diameter contradicts the conical in that a conical surface has a constant changing diameter.

The claims were examined as best understood.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6, 7, 10, 12, 15-17, 19, 22, 24, 27-30, 32-34, 38-41, 44-46, and 49-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutter (US 5,704,747) in view of Peterson (US 5,096,350). As best seen in Fig.8, Hutter discloses fastener assembly including a nut (18) wherein the nut is shown to have a transition portion including a conical countersink and concave radius interface with a thickness greater than that of both a threaded cylindrical body and transverse base and spanning substantially the entire transition portion. Hutter further discloses the nut received within a retaining means (20) having a planer surface which allows the nut limited movement relative thereto. The fastener assembly is described as intended for use with automobile (column 1, line 17). The formation of the body by heat treating or cold working is a product-by-process limitation wherein it is only the final product considered for patentability. Hutter does not disclose the configuration of the retaining means as formed pair of bent over flanges including open ends. Peterson discloses a similar type fastener assembly as Hutter but, Peterson discloses the retaining means formed as pair of flanges (34, 36) bent over to cover a nut base portion (see Fig. 2) and configured to include open ends. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the retaining means of Hutter with one as disclosed in Peterson because the retaining means disclosed in Peterson is of a simplified structure and Hutter does not have any criticality to the dome shaped retaining means and. The cage as disclosed in Peterson is only a single piece whereas

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the Hutter is two separate pieces. Lastly, the specific material and its strength properties would have been recognized depending upon the particular application of the assembly.

Since Hutter shows the shape of the countersink shape to be the same as that disclosed, it also inherently includes the "flat surface".

In regards to claim 3, the welding of a cage nut is well known and would have been recognized as a substitute for the adhesive of Hutter depending upon the particular application. In other words, the skilled artisan would have recognized to weld the cage onto the substrate if the substrate were metal rather than composite. There is nothing which would preclude the cage from being welded onto a metal substrate.

In regards to claims 24, 49 and 54, in order to satisfy the requirement that the outer diameter of the conical portion is greater than the first diameter (presuming the first diameter is intended to be that of the nut body) the first diameter is read as the inner diameter of the nut thus making the conical portion's diameter greater in relation thereto. Alternatively, it would have been obvious to change the size of the conical portion in Hutter to be within the relative range as claimed since changing dimensions is well known to yield predictable results such as in this case, a simply larger conical portion which in this case would have the added benefit of aligning the fastener over a greater range.

***Response to Remarks***

Even after the claims were amended, the 112 second paragraph rejection remains. As noted above, a conical surface cannot also be flat even if it is defined as parallel to the axis. Simply stated a conical *surface* cannot be flat. As a suggestion, applicant can simply define the countersink as being “conical” since that would inherently include what applicant is interpreting as a flat surface or alternatively, while the surface cannot be flat the surface does define a straight line in cross section. Also, as regards the “conical diameter” is could simply be stated as a --diameter-- however, applicant should take care in defining the location of the diameter.

In response to applicant's arguments against the Hutter and Peterson individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that Hutter does not show a countersink the “corresponds to or is aligned with the transition portion”. In response, the examiner disagrees because the recited limitation is very broad and since Hutter’s countersink is at a location between the base and threaded portion it reads on the limitation. Furthermore, Hutter even shows the countersink at the same location where the countersink is shown in the instant application thus it would read on the claim limitation in a similar manner as in the

instant invention. Finally, applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's next argument is that neither Hutter nor Peterson teach the countersink or conical diameter "opposite the base" which is greater than the first diameter of the body is not understood because it appears that the greater diameter is at the base not opposite it. Even so, in view of the recent Supreme Court decision in *KSR v. Teleflex* it must be viewed as obvious to change the size of the conical portion since the change in size would yield predictable results.

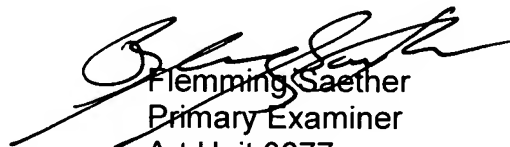
Finally, applicant's sales figures are an inadequate showing of commercial success because they simply do not show that it is the claimed features which lead to the success. Furthermore, it has not even been shown that the sales figures constitute a commercial success.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Flemming Saether  
Primary Examiner  
Art Unit 3677